

ABSTRACT OF THE DISCLOSURE

An improved method for the simultaneous sequence-specific identification of
5 mRNAs in a mRNA population allows the visualization of nearly every mRNA expressed
by a tissue as a distinct band on a gel whose intensity corresponds roughly to the
concentration of the mRNA. In general, the method comprises the formation of cDNA
using anchor primers to fix a 3'-endpoint, producing cloned inserts from the cDNA in a
vector containing a bacteriophage-specific promoter for subsequent RNA synthesis,
10 generating linearized fragments of the cloned inserts, preparing cRNA, transcribing
cDNA from the cRNA and performing two sequence specific PCR amplifications of the
cDNA. The method can identify changes in expression of mRNA associated with the
administration of drugs or with physiological or pathological conditions. Also provided
are vectors and primers useful for the practice of the improved method.

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